

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks
(ROSPATENT) added to list of core patent offices covered
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status
data from INPADOC
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 10 MAR 22 KOREPAT now updated monthly; patent information enhanced
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS 12 MAR 22 PATDPASPC - New patent database available
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS 14 APR 04 EPFULL enhanced with additional patent information and new
fields
NEWS 15 APR 04 EMBASE - Database reloaded and enhanced
NEWS 16 APR 18 New CAS Information Use Policies available online
NEWS 17 APR 25 Patent searching, including current-awareness alerts (SDIs),
based on application date in CA/CAPLUS and USPATFULL/USPAT2
may be affected by a change in filing date for U.S.
applications.
NEWS 18 APR 28 Improved searching of U.S. Patent Classifications for
U.S. patent records in CA/CAPLUS
NEWS 19 MAY 23 GBFULL enhanced with patent drawing images
NEWS 20 MAY 23 REGISTRY has been enhanced with source information from
CHEMCATS
NEWS 21 MAY 26 STN User Update to be held June 6 and June 7 at the SLA 2005
Annual Conference
NEWS 22 JUN 06 STN Patent Forums to be held in June 2005
NEWS 23 JUN 06 The Analysis Edition of STN Express with Discover!
(Version 8.0 for Windows) now available

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JUN 2005 HIGHEST RN 852020-24-7
DICTIONARY FILE UPDATES: 9 JUN 2005 HIGHEST RN 852020-24-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from
* the IDE default display format and the ED field has been added,
* effective March 20, 2005. A new display format, IDERL, is now
* available and contains the CA role and document type information.
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December

26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005 (20050609/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> solid liquid
 963770 SOLID
 273646 SOLIDS
 1165923 SOLID
 (SOLID OR SOLIDS)
 684284 LIQUID
 122774 LIQUIDS
 777118 LIQUID
 (LIQUID OR LIQUIDS)
 953591 LIQ
 90892 LIQS
 988991 LIQ
 (LIQ OR LIQS)
 1369240 LIQUID
 (LIQUID OR LIQ)
L1 27615 SOLID LIQUID
 (SOLID(W) LIQUID)

=> liquid solid
 684284 LIQUID
 122774 LIQUIDS
 777118 LIQUID
 (LIQUID OR LIQUIDS)
 953591 LIQ
 90892 LIQS
 988991 LIQ
 (LIQ OR LIQS)
 1369240 LIQUID
 (LIQUID OR LIQ)
 963770 SOLID
 273646 SOLIDS
 1165923 SOLID
 (SOLID OR SOLIDS)
L2 20709 LIQUID SOLID
 (LIQUID(W) SOLID)

=> l1 or l2
L3 43992 L1 OR L2

=> reaction
 2806844 REACTION
 2025116 REACTIONS
L4 3753322 REACTION
 (REACTION OR REACTIONS)

=> 13(1)14
L5 4694 L3(L) L4

=> ether or ester
 461819 ETHER
 141927 ETHERS
 520226 ETHER
 (ETHER OR ETHERS)
 562068 ESTER
 419051 ESTERS
 784851 ESTER
 (ESTER OR ESTERS)

L6 1199985 ETHER OR ESTER

=> acid anhydride
 3987175 ACID
 1478723 ACIDS
 4465898 ACID
 (ACID OR ACIDS)
 196206 ANHYDRIDE
 31405 ANHYDRIDES
 206289 ANHYDRIDE
 (ANHYDRIDE OR ANHYDRIDES)

L7 24236 ACID ANHYDRIDE
 (ACID(W)ANHYDRIDE)

=> 16 or 17
L8 1214708 L6 OR L7
 75% OF LIMIT FOR TOTAL ANSWERS REACHED

=> 18 and 15
L9 323 L8 AND L5

=> 1891)15
UNMATCHED RIGHT PARENTHESIS 'L89L)L5'
The number of right parentheses in a query must be equal to the
number of left parentheses.

=> 18(l)15
L10 215 L8(L)L5

=> salt
 739656 SALT
 575425 SALTS

L11 1102160 SALT
 (SALT OR SALTS)

=>

=> 110 and 111
L12 52 L10 AND L11

=> d 112 42-52 ti

L12 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Quaternary ammonium salts as catalysts in nucleophilic
substitution reactions in a solid-liquid-two phase system

L12 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Detergents with nonseparating peroxide salts

L12 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Condensation of esters by branched organomagnesium compounds. XIV.
Physicochemical investigation of an intermediate obtained during the
synthesis of β-hydroxy esters by a magnesium complex of tert-butyl
acetate

L12 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Fibrous or porous textile material from oriented organic polymers

L12 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Effect of solid phase on foam stability

L12 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI The insecticidal principles of Haplophyton cimicidum. I. Haplophytine

L12 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Oxazoles and oxazolones

L12 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Strychnine alkaloids. XXXIII. Degradation of quaternary **salts** of vomicine and desoxyvomicine

L12 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Cyclizing polymerization of acetylene. I. Cyclo-octatetraene

L12 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Systems with recurrent fusion curves. I

L12 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI The constitution of nitrogen tetroxide and the products that it forms with limited amounts of water

=> d 112 42 ti fbib abs

L12 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Quaternary ammonium **salts** as catalysts in nucleophilic substitution reactions in a solid-liquid-two phase system
AN 1978:66293 CAPLUS
DN 88:66293
TI Quaternary ammonium **salts** as catalysts in nucleophilic substitution reactions in a solid-liquid-two phase system
AU Jonczyk, Andrzej; Ludwikow, Maria; Makosza, Mieczyslaw
CS Inst. Org. Chem. Technol., Tech. Univ. Warsaw, Warsaw, Pol.
SO Angewandte Chemie (1978), 90(1), 58
CODEN: ANCEAD; ISSN: 0044-8249
DT Journal
LA German
AB Aliquot 336 (tech. methyltriocetylammmonium chloride) was used as a catalyst in the **solid-liquid** nucleophilic substitution reaction of K and Na **salts** with alkyl halides and methanesulfonate **esters** in organic solvents (MeCN and CH₂Cl₂).

=> d 112.31-41 ti

L12 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Substitution and elimination reactions of poly(epichlorohydrin) and poly(2-chloroethyl vinyl ether) using phase transfer catalysis

L12 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Poly(oxyalkylene) ethers

L12 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Substitution reaction of poly((chloromethyl)styrene) with **salts** of various nucleophilic reagents using phase-transfer catalysts

L12 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

- TI Substitution reaction of poly(chloromethylstyrene) with some nucleophilic reagents using triphase transfer catalysis
- L12 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Substitution reactions of poly[2-(2-chloro-5-nitrobenzoyloxy)ethyl methacrylate] and poly[2-(4-chloro-3-nitrobenzoyloxy)ethyl methacrylate] with some nucleophilic reagents using phase transfer catalysis
- L12 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Esterification reaction of poly[(chloromethyl)styrene] with salts of carboxylic acid using phase-transfer catalysts
- L12 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Solid cationic polymers
- L12 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Chemistry of crown ethers. XVII. Triphase catalysis by immobilized benzo-18-crown-6
- L12 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Comparison between the role of water and that of a crown ether in the context of the Wittig reaction in liquid-solid heterogeneous media
- L12 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Stereoselective synthesis of optically active dictyopterenes A and B and their geometrical isomers
- L12 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Enantioselective ester synthesis in the presence of optically active polymers

=> d 112 20-30 ti

- L12 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Michael reaction of chloro esters in a two-phase solid-liquid system
- L12 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis of crosslinked macrocyclic polyethers with pendant quaternary ammonium salt
- L12 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Synthesis of natural esters of substituted cinnamic acids
- L12 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Polymer supported phase-transfer catalysis and catalysts
- L12 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Palladium-catalyzed desulfonylative coupling of arylsulfonyl chlorides with acrylate esters under solid-liquid phase-transfer conditions
- L12 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Intensification of heterogeneous reactions through hydrotropy: alkaline hydrolysis of esters and oximation of cyclododecanone
- L12 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
- TI Asymmetric induction under two-phase conditions. (I). Asymmetric induction in the Gabriel reaction by using two-phase system - synthesis of optically active amino acids
- L12 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Iminocarbonic acid alkyl ester dialkylamides
L12 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol
L12 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Two-phase reaction of 1-bromo octane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium salts
L12 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Functionalized ethylene oligomers as phase-transfer catalysts

=> d 112 20,28,29 ti fbib abs

L12 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Michael **reaction** of chloro **esters** in a two-phase **solid-liquid** system
AN 1992:173586 CAPLUS
DN 116:173586
TI Michael **reaction** of chloro **esters** in a two-phase **solid-liquid** system
AU Yan, Chaoguo; Kong, Qiangzhi; Lu, Wenxing; Wu, Jitao
CS Dep. Chem., Yangzhou Teach. Coll., Jiangsu, 225002, Peop. Rep. China
SO Chinese Chemical Letters (1991), 2(10), 753-4
CODEN: CCLEET; ISSN: 1001-8417
DT Journal
LA English
OS CASREACT 116:173586
AB The Michael addition of α -chloro **esters** to α,β -unsatd. systems was catalyzed by tetraalkylammonium **salts** in a two-phase **solid-liquid** system, and some polysubstituted cyclopropanes were easily prepared. Thus, Michael **reaction** of $\text{ClCH}_2\text{CO}_2\text{Et}$ with $\text{CH}_2:\text{CHCO}_2\text{Et}$ in the presence of $\text{PhCH}_2\text{NET}_3\text{Cl}$ as phase-transfer catalyst in DMF as solvent and K_2CO_3 gave 66% di-Et cyclopropane-1,2-dicarboxylate.

L12 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol
AN 1986:442606 CAPLUS
DN 105:42606
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol
AU Depreux, P.; Marcincal-Lefebvre, A.
CS Lab. Chim. Org., Fac. Pharm. Lille, Lille, 59045, Fr.
SO Canadian Journal of Chemistry (1986), 64(3), 626-32
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA French
OS CASREACT 105:42606
AB Amino **ethers** of trans-2-phenoxyhexanol were prepared by methods involving anhydrous conditions (sodium alkoxides in xylene) or phase transfer catalysis (PTC) conditions (liquid-liquid or **solid-liquid** two-phase systems). In the liquid-liquid two-phase system, when no catalyst was added, the **reaction** proceeds with comparable or even better yields than with some PTC catalysts, a quaternary **salt** being formed in situ. The deprotonation of the alc. takes place at the interface, since there was no OH^- extraction in organic medium and the yield depends on the stirring speed. In the presence of aliquat, the yield does not change with the organic concentration of the catalyst. Statistical correlations

obtained between the variations in yield and several other parameters were good.

L12 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Two-phase reaction of 1-bromoocetane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium salts
AN 1986:68420 CAPLUS
DN 104:68420
TI Two-phase reaction of 1-bromoocetane with sodium acetate and potassium acetate catalyzed by bisquaternary ammonium salts
AU Schiefer, H.; Beger, J.; Lorenz, U.
CS Sekt. Chem., Bergakad. Freiberg, DDR-9200, Ger. Dem. Rep.
SO Journal fuer Praktische Chemie (Leipzig) (1985), 327(3), 383-98
CODEN: JPCEAO; ISSN: 0021-8383
DT Journal
LA German
OS CASREACT 104:68420
AB trans-R2N+R1CH2CH:CHCH2N+R2R1 2X- (I, R = Me, Et, Bu; R1 = Bu, octyl, dodecyl, hexadecyl, PhCH₂; X = Cl, Br) (diquats) were prepared either from trans-R2NCH2CH:CHCH2NR₂ and R1X or from trans-1,4-dibromo-2-butene and R2NR₁. The **reaction** of Me(CH₂)₇Br with NaOAc or KOAc in the liquid-liquid 2-phase system without addnl. solvent was catalyzed more effectively by the unsatd. diquats than by saturated diquats and monoquats. Most of the quats catalyze **ester** formation from NaOAc more effectively in the liquid-liquid system, but **ester** formation from KOAc more effectively in the **solid-liquid** system. KOAc was generally better than NaOAc in both systems.

=> d 112 9-19 ti

L12 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Combustion of ammonium nitrate-based compositions. Part 1. Mixtures of ammonium nitrate with catalysts and high explosives

L12 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes

L12 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic optical resolution of racemic amines and amino acids by (1→6)-2,5-anhydro-3,4-di-O-methyl-D-glucitol bound on silica gel

L12 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Novel microporous solid "superacids": Cs_xH_{3-x}PW₁₂O₄₀ (2 ≤ x ≤ 3)

L12 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Cyclophosphazenic polypodands as powerful cation complexing agents, efficient phase-transfer catalysts and anion activators

L12 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic optical resolution of racemic amine and amino acid salts by (1→6)-2,5-anhydro-3,4-di-O-methyl-D-glucitol bound on silica gel.

L12 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Crown **ether** catalyzed stereospecific synthesis of Z- and E-stilbenes by Wittig **reaction** in a **solid-liquid** two-phases system

L12 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergism and antagonism in phase-transfer catalysis

- L12 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides
- L12 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Synergism in liquid/solid phase-transfer catalysis
- L12 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of perbenzyl carbohydrate derivatives

=> d 112 10,17-19 ti fbib abs

L12 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes
 AN 1997:618713 CAPLUS
 DN 127:262519
 TI Preparation of diaminodiphenyl ethers from aminophenols and chloronitrobenzenes
 IN Horiuchi, Hiroshi; Shono, Hisashi; Hasegawa, Hideo
 PA Teijin Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09241225	A2	19970916	JP 1996-49867 JP 1996-49867	19960307 19960307

AB Diaminodiphenyl **ethers** are prepared by condensation of aminophenols with chloronitrobenzenes in the presence of basic K compds. in DMF, removing resulting K **salts** from the **reaction** mixts. by **solid-liquid** separation, contacting the solns. with inorg. adsorbents to reduce solubilized K into ≤ 10 ppm (by weight), catalytic hydrogenation of the solns. in the presence of catalysts, and recovering the catalysts and DMF for recycling. M-aminophenol was refluxed with p-chloronitrobenzene and K₂CO₃ in DMF for 6 h, filtered, the filtrate treated with activated alumina at 25° for 2 h, filtered, and the filtrate was hydrogenated over Pd/C. The catalyst was recovered and repeatedly used in the same **reaction** 10 times in total without forming sticky Pd/C.

L12 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides

AN 1995:986658 CAPLUS

DN 124:116854

TI Preparation of 2-(methylthio)-6-alkylphenyl ethers as intermediates for herbicides

IN Inoe, Tsutomu; Yamaguchi, Masao; Takahashi, Atsushi

PA Nippon Soda Co, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

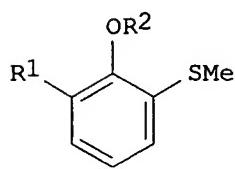
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07247267	A2	19950926	JP 1994-66651 JP 1994-66651	19940310 19940310



I

AB The title compds. I (R¹ = alkyl; R² = alkyl, aralkyl) (II), useful as intermediates for drugs and agrochems, especially for herbicides, are prepared by solid-liquid treatment of I (R¹ is the same as in II; R² = H) (III) with R₂X (R² = alkyl, aralkyl) or R₂SO₄ (R² = lower alkyl) in the presence of bases and quaternary ammonium salts. A toluene solution of 8.62 g III (R¹ = Me) (preparation given) was treated with an aqueous NaOH solution under azeotropic dehydration and the obtained crystal was treated with Bu₄N⁺ Br⁻ and Me₂SO₄ under stirring at room temperature for 3 h to give 6.60 g II (R¹ = R² = Me).

L12 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergism in liquid/solid phase-transfer catalysis
AN 1995:622252 CAPLUS
DN 123:198191
TI Synergism in liquid/solid phase-transfer catalysis
AU Savyolova, Vera A.; Vakhitova, Lyubov N.; Magasinski, Aleksandr N.; Rybak, Vladimira V.; Panchenko, Boris V.
CS L. M. Litvinenko Inst. Phys. Org. Coal Chem., Natl. Acad. Sci. Ukraine, Donetsk, 340114, Ukraine
SO Mendeleev Communications (1995), (3), 123-4
CODEN: MENCEX; ISSN: 0959-9436
PB Russian Academy of Sciences
DT Journal
LA English
AB Powerful synergism in the hydrolysis reaction of p-nitrophenyl acetate in a liquid/solid system in the presence of the catalytic couple quaternary onium salt/crown ether has been detected.

L12 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of perbenzyl carbohydrate derivatives
AN 1994:54883 CAPLUS
DN 120:54883
TI Preparation of perbenzyl carbohydrate derivatives
IN Szeja, Wieslaw; Gryniewicz, Grzegorz; Bieg, Tadeusz; Bogusiak, Jadwiga; Fokt, Izabela; Konopka, Miroslawa
PA Instytut Przemyslu Farmaceutycznego, Pol.
SO Pol., 9 pp. Abstracted and indexed from the unexamined application.
CODEN: POXXA7

DT Patent
LA Polish
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	PL 158083	B1	19920731	PL 1988-273529 PL 1988-273529	19880705 19880705
OS	CASREACT 120:54883				

AB Carbohydrate derivs. are prepared by alkylation with benzyl halides such that the **reaction** is carried out in a two-phase liquid-liquid or liquid-solid system in which one phase consists of an inorg. base, preferably an alkali metal hydroxide possibly mixed with an alkali metal carbonate in the solid state or as an aqueous solution, especially a 1:4 mixture of solid sodium hydroxide and anhydrous potassium carbonate, with a small excess of benzyl halide, preferably benzyl chloride, in the presence of a tertiary amine or quaternary ammonium **salt**, preferably tetra-n-butylammonium hydrogen sulfate and also in the presence of a tertiary alc., especially tert-Bu or tert-amyl alcs., in an aromatic hydrocarbon medium, especially benzene or toluene, or in a halogenated aliphatic hydrocarbon, preferably methylene chloride or ethylene dichloride, or in an **ether**, preferably di-Et or di-Bu **ethers**, THF, or dioxane, or in a mixture of these solvents, possibly with added dipolar aprotic solvent, such as DMSO; after the **reaction** the benzylation product is isolated by known methods. Thus, alkylation of 1,2-O-isopropylidene- α -D-glucofuranose with PhCH₂Cl in C₆H₆ containing tert-amyl alc., Bu₄NHSO₄, and 50% aqueous NaOH gave 81% 3,5,6-tri-O-benzyl-1,2-O-isopropylidene- α -D-glucofuranose.

=> d 112 1-8 ti

L12 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether

L12 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters

L12 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Synthesis of novel amphiphilic pyridinylboronic acids

L12 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system

L12 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Phase-transfer catalysis in oxidation of cyclohexene with potassium permanganate. II. Phase-transfer catalytic processes

L12 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Catalysis by porous heteropoly compounds

L12 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Onium **salts** and crown compounds in phase transfer catalysis

L12 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis

=> d 112 1,2,4,8 ti fbib abs

L12 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether

AN 2003:1012986 CAPLUS

DN 141:140051

TI Novelties of solid-liquid phase transfer catalyzed synthesis of o-nitrodiphenyl ether
AU Yadav, Ganapati D.; Subramanian, S.
CS University Institute of Chemical Technology, Department of Chemical Engineering, University of Mumbai, Mumbai, 400019, India
SO Journal of Molecular Catalysis A: Chemical (2004), 209(1-2), 75-82
CODEN: JMCCF2; ISSN: 1381-1169
PB Elsevier Science B.V.
DT Journal
LA English
AB O-Nitrodiphenyl **ether** is an important intermediate in the fine chemical industry and used in a number of drugs. This **ether** is typically prepared from o-chloronitrobenzene (OCNB) by condensing with alkali metal phenoxides in toluene or xylene in presence of copper or cuprous chloride and the process requires a high temperature to initiate the formation of cuprous **salt** of phenol. Once initiated the **reaction** is exothermic and can sometimes become uncontrolled leading to the formation of tarry masses. In the current work synthesis of o-nitrodiphenyl **ether** was accomplished by reacting o-chloronitrobenzene with solid potassium phenoxide using tetra-n-butylphosphonium bromide as a catalyst under **solid-liquid** phase transfer catalysis (S-L PTC). The advantages of S-L PTC are that the **reaction** is conducted at controllable temps., the rates of **reaction** are increased by orders of magnitude and the **reaction** is 100% selective, in comparison with the liquid-liquid (L-L) PTC which is very slow and produces byproducts. The mechanism based on homogeneous solubilization of solid resulting in the formation of an active ion-pair with the nucleophile was found to prevail in the system. A complete theor. anal. is done to determine both the rate constant and equilibrium constant from the same set of data. The **reaction** is intrinsically kinetically controlled.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters
AN 2003:785394 CAPLUS
DN 141:93955
TI Solvent-free reactions as green chemistry procedures for the synthesis of cosmetic fatty esters
AU Villa, C.; Mariani, E.; Loupy, A.; Grippo, C.; Grossi, G. C.; Bargagna, A.
CS Dipartimento di Scienze, Farmaceutiche dell'Universita, Genoa, Italy
SO Green Chemistry (2003), 5(5), 623-626
CODEN: GRCHFJ; ISSN: 1463-9262
PB Royal Society of Chemistry
DT Journal
LA English
AB **Solid-liquid** solvent-free phase transfer catalysis (PTC) and acidic catalysis in dry media were applied, as green chemical procedures, to the synthesis under mild conditions of long chain aliphatic **esters** of interest in the cosmetic field. The **reactions** were performed under conventional heating and microwave activation, analyzing the profiles of the temperature increases during the **reactions** and studying the yields at different **reaction** times. The selected **esters** were obtained with very good yields within short **reaction** times. Using Aliquat 336 as phase transfer agent, the results showed lower yields under classical heating for very short **reaction** times (5 min), but usually comparable to the yields obtained under microwave heating extending the **reaction** time up to 15 min. The simple heterogeneous mixture of reagents with catalytic amount of neat p-toluenesulfonic acid (PTSA) under classical heating leads to

good results, similar to those obtained under microwave activation with regards to yields and **reaction** times (10 min for microwave activation/15 min for oil bath).

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system
AN 2002:874993 CAPLUS
DN 138:305745
TI Phase-transfer catalyzed etherification for synthesizing allyl phenyl ether in solid-liquid-liquid system
AU Yang, Hung-Ming; Li, Chih-Ch'ing
CS Department of Chemical Engineering, National Chung Hsing University, Taichung, Taiwan, 402, Peop. Rep. China
SO Shiyou Jikan (2002), 38(3), 27-37
CODEN: SYCKE4; ISSN: 1022-9671
PB Chinese Petroleum Institute
DT Journal
LA Chinese
OS CASREACT 138:305745
AB The kinetics of **solid-liquid-liquid** phase-transfer catalyzed etherification for synthesizing specialty chemical, allyl Ph **ether**, in a stirred batch reactor was investigated in the present study. The solid catalysts were prepared from immobilizing different alkyl amines as the active sites onto macroporous or microporous polystyrene copolymer beads. The product yield of the etherification of sodium phenoxyde with allyl bromide was achieved above 75% within 2 h at 60° over the immobilized catalysts. From the exptl. results, the external mass transfer resistance can be ignored when the agitation speed exceeds 350 rpm. The apparent **reaction** rate increases with decreasing catalyst particle size, exhibiting the overall **reaction** controlled by both internal diffusion and intrinsic organic **reaction**. The activity of macroporous catalyst is found better than that of microporous one for the same degree of crosslinking of the support, revealing that the **reaction** rate was influenced by the structure of the catalyst significantly. Increasing the degree of crosslinking of the support leads to the reduction of solvent swelling and the contact of reactants due to the more rigid network of the support. The order of activity for different active sites of macroporous catalyst was tri-Bu amine > tri-Et amine ≈ trioctyl amine. The apparent activation energies were also estimated from the results at different **reaction** temps. The catalytic activity was gradually reduced, however, within 5% for recovered catalyst, demonstrating the satisfactory stability of the catalyst. The kinetic model for triphase catalysis was also set up and the pseudo-first-order **reaction** was applied to describe the etherification successfully. The present study can be used as the basis for designing the etherification **reaction** process.

L12 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis
AN 1998:749013 CAPLUS
DN 130:66090
TI Kinetics of etherification of ethyl 2-bromoisobutyrate via solid/liquid phase transfer catalysis
AU Yang, Hung-Ming; Chen, Tsan-Ming
CS Department of Chemical Engineering, National Chung-Hsing University, Taichung, 402, Taiwan
SO Journal of the Chinese Institute of Chemical Engineers (1998), 29(5), 367-374
CODEN: JCICAP; ISSN: 0368-1653

PB Chinese Institute of Chemical Engineers
 DT Journal
 LA English
 AB Phase transfer catalyzed **reactions** such as esterification, hydrolysis, and halide exchange were reported to conduct successfully in **solid-liquid** phase transfer catalysis (SLPTC). In the present work, the kinetics for synthesizing **ether-esters** from the etherification of Et 2-bromoisoctanoate under **solid-liquid** phase transfer conditions was investigated. The **reaction** was carried out in a stirred batch reactor with isothermal jacket, using potassium 4-benzyloxyphenoxide as the solid reactant. The potassium **salt** was prepared from deprotonation of 4-benzyloxyphenol with potassium hydroxide in aqueous solution. Using the **solid/liquid** system, the usual hydrolysis of **ester** compds. in alkali aqueous/organic phases can be prevented under anhydrous conditions. High conversion of etherification of Et 2-bromoisoctanoate in organic solvent can be obtained. The exptl. data were described by pseudo-first-order kinetics. Various quaternary 'onium **salts**' were employed to compare their efficiencies for etherification. Effects of agitation speed, **reaction** temperature, organic solvent and small quantities of water addition were explored to find the optimal operating conditions. From the exptl. results, the **reaction** rates are not influenced by the stirring speed when the agitation speed exceeds 350 rpm. The **reaction** rate increases with increasing the polarity of solvent. The temperature effects as well as the activation energy for various phase transfer catalysts were investigated. The activation energy for TBAB was calculated to be 15.2 Kcal/mol. Small quantities of water addition can also enhance the reactivity of catalyst.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d cost			
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	.
CONNECT CHARGES	8.19	8.71	
NETWORK CHARGES	1.26	1.38	
SEARCH CHARGES	18.90	18.90	
DISPLAY CHARGES	48.44	48.44	
<hr/>			
FULL ESTIMATED COST	76.79	77.43	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	.
CA SUBSCRIBER PRICE	-8.76	-8.76	

IN FILE 'CAPLUS' AT 07:37:45 ON 10 JUN 2005

=> d his

(FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005

L1	27615 SOLID LIQUID
L2	20709 LIQUID SOLID
L3	43992 L1 OR L2
L4	3753322 REACTION
L5	4694 L3(L) L4
L6	1199985 ETHER OR ESTER

L7 24236 ACID ANHYDRIDE
L8 1214708 L6 OR L7
L9 323 L8 AND L5
L10 215 L8(L)L5
L11 1102160 SALT
L12 52 L10 AND L11

=> williamson
L13 1323 WILLIAMSON

=> l3 and l13
L14 18 L3 AND L13

=> d l14 10-18 ti

L14 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Crosslinked poly(N-vinylpyrrolidone) as solid cosolvent

L14 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solvating effect of copolymers of styrene with a poly(oxyethylene) chain macromer. Effect of the polymer support

L14 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Optimization of polymer-supported oligoethers as **solid-liquid** phase transfer catalysts

L14 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Block ethylene oxide-styrene copolymers as **solid-liquid** phase transfer catalysts

L14 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Nonsupported and resin-supported oligo(oxyethylenes) as **solid-liquid** phase-transfer catalysts. Effect of chain length and head-group

L14 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Mechanism of **solid-liquid** phase transfer catalysis by polymer-supported linear polyethers

L14 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Linear polymers and block copolymers as **solid-liquid** phase transfer catalysts

L14 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase systems

L14 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Strychnine alkaloids. XXXIII. Degradation of quaternary salts of vomicine and desoxyvomicine

=> d l14 17 ti fbib abs

L14 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase systems

AN 1979:21676 CAPLUS
DN 90:21676

TI Reactions of organic anions. 86. Sodium and potassium carbonates: efficient strong bases in **solid-liquid** two-phase

systems
AU Fedorynski, Michal; Wojciechowski, Krzysztof; Matacz, Zygmunt; Makosza, Mieczyslaw
CS Inst. Org. Chem. Technol., Tech. Univ. Warsaw, Warsaw, Pol.
SO Journal of Organic Chemistry (1978), 43(24), 4682-4
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Anhydrous K₂CO₃ and Na₂CO₃ in the presence of tetraalkylammonium salts or crown ethers were efficient strong bases for the generation and reactions of carbanions. The following reactions were accomplished: (1) alkylation of di-Et malonate, Me cyanoacetate, and Et acetoacetate; (2) alkylation and nitroarylation of 9-substituted fluorenes and diphenylacetaldehyde; (3) alkylation of phenylacetonitrile; (4) acylation of 2-phenylalkanenitrile; (5) Michaelis-Becker alkylation of di-Et phosphate; (6) Darzens condensation; (7) dibromocarbene generation; (8) Williamson ether synthesis.

=> d 114 1-9 ti

- L14 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis and properties of amphiphilic copolymers of butyl acrylate and methyl methacrylate with uniform polyoxyethylene grafts
- L14 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a **solid-liquid** reaction
- L14 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Quantum simulations of **solids, liquids, and nanostructures**
- L14 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid**, liquid-liquid or in the presence of microwaves
- L14 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent
- L14 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Characteristics of multiblock styrene-butadiene-oxyethylene copolymers containing polyoxyethylene
- L14 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI A novel procedure for the synthesis of ether-bridged perfluoro non-ionic surfactants
- L14 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents
- L14 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol

=> d 114 2,4,5,8,9 ti fbib abs

- L14 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a **solid-liquid** reaction
AN 2003:202537 CAPLUS

DN 138:223603
 TI Method for carrying out a **solid-liquid** reaction
 IN Klopp, Ingo; Bogenstaetter, Thomas; Franke, Dirk; Munzinger, Manfred
 PA Basf Aktiengesellschaft, Germany
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2

DT Patent
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003020411	A1	20030313	WO 2002-EP9659	20020829
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE	10142284	A1	20030320	DE 2001-10142284	A 20010829
TW	592829	B	20040621	DE 2001-10142284	20010829
				TW 2002-91119416	20020827
CA	2458812	AA	20030313	DE 2001-10142284	A 20010829
				CA 2002-2458812	20020829
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
EP	1423187	A1	20040602	EP 2002-767452	20020829
EP	1423187	B1	20050302		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
BR	2002012168	A	20040720	BR 2002-12168	20020829
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
NZ	531344	A	20041029	NZ 2002-531344	20020829
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
JP	2005501695	T2	20050120	JP 2003-524713	20020829
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
AT	289864	E	20050315	AT 2002-767452	20020829
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829
US	2004204605	A1	20041014	US 2004-487214	20040219
				DE 2001-10142284	A 20010829
				WO 2002-EP9659	W 20020829

AB A **solid-liquid** reaction is carried by (1) preparation of a reaction suspension containing a 1st reactant which is suspended and a 2nd reactant which is dissolved in a suspension medium, whereby 1 of the reaction products is insol. in the suspension medium, (2) feeding the reaction suspension through a longish reaction zone, whereby the Reynolds number of the flow <20,000, and (3) separation of the insol. reaction product. The method is advantageous in that the insol. reaction product is obtained in a form which is easy to filter. The method is especially suitable for manufacture

of (PhCO₂)₃P by reacting PhCO₂Na or PhCO₂NH₄ with PCl₃.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid**, liquid-liquid or in the presence of microwaves
AN 1998:636409 CAPLUS
DN 129:316001
TI Synthesis of phenolic ethers in heterogeneous media: **solid-liquid**, liquid-liquid or in the presence of microwaves
AU Bratulescu, George; Le Bigot, Yves; Delmas, Michel; Pogany, Iuliu
CS Unite Recherche:Fibres, Energie, Biomonomeres, Institut National Polytechnique Toulouse, Ecole Nationale Superieure Chimie, Toulouse, 31077, Fr.
SO Revue Roumaine de Chimie (1998), 43(4), 321-326
CODEN: RRCHAX; ISSN: 0035-3930
PB Editura Academiei Romane
DT Journal
LA French
AB RC₆H₄CH₂OC₆H₄R₁ [R = 4-Cl, 2-Cl, 4-Br, 4-F, 4-Me, H; R₁ = H, 3-Me, 2-Me, 4-Me, 4-NO₂] were obtained in excellent yields by **Williamson** reaction of RC₆H₄CH₂Cl with HO-C₆H₄R₁ in a heterogeneous medium, i.e., using K₂CO₃ in a solvent or using aqueous KOH and Aliquat 336 as phase transfer catalyst or aqueous KOH and microwave heating.

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent
AN 1996:376451 CAPLUS
DN 125:59332
TI Selective etherification of hydroxylated polyoxyalkylenes in the absence of solvent
AU Abribat, B.; Le Bigot, Y.; Gaset, A.
CS Lab. Chimie Agro-Industrielle, Toulouse, 31077, Fr.
SO Tetrahedron (1996), 52(24), 8245-8256
CODEN: TETRAB; ISSN: 0040-4020
PB Elsevier
DT Journal
LA French
AB The **Williamson** reaction, realized in a biphasic **solid/liquid**, slightly hydrated medium, allows the selective transformation of primary or secondary polyoxyalkylenes alc. functions, under simple and economical conditions: no solvent and ambient temperature. The use of KOH catalyst for dialkylation of polypropylene glycol employing various alkyl halides is illustrated.

L14 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2005 ACS on STN
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents
AN 1988:509936 CAPLUS
DN 109:109936
TI Improved and simplified synthesis of aryl ethers by alkylation of phenolate ions. **Solid-liquid** phase-transfer catalysis in the absence of organic solvents
AU Loupy, Andre; Sansoulet, Jean; Vaziri-Zand, Farchid
CS Lab. React. Select. Supports, Univ. Paris-Sud, Orsay, 91405, Fr.
SO Bulletin de la Societe Chimique de France (1987), (6), 1027-35
CODEN: BSCFAS; ISSN: 0037-8968
DT Journal
LA French
OS CASREACT 109:109936
AB Aryl ethers are obtained in excellent yields under mild and economical

conditions in the absence of organic solvents by the reaction of stoichiometric amts. of phenols, finely ground KOH, and alkyl bromides in the presence of 2% Aliquat 336. E.g., p-MeCOC₆H₄OH reacts with Me(CH₂)₇Br under these conditions to give 97% p-MeCOC₆H₄O(CH₂)₇Me.

L14 ANSWER 9 OF 18 CAPIUS COPYRIGHT 2005 ACS on STN
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol
AN 1986:442606 CAPIUS
DN 105:42606
TI Phase-transfer reaction conditions in the synthesis of amino ether derivatives of trans-2-phenoxyhexanol
AU Depreux, P.; Marcinck-Lefebvre, A.
CS Lab. Chim. Org., Fac. Pharm. Lille, Lille, 59045, Fr.
SO Canadian Journal of Chemistry (1986), 64(3), 626-32
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA French
OS CASREACT 105:42606
AB Amino ethers of trans-2-phenoxyhexanol were prepared by methods involving anhydrous conditions (sodium alkoxides in xylene) or phase transfer catalysis (PTC) conditions (liquid-liquid or solid-liquid two-phase systems). In the liquid-liquid two-phase system, when no catalyst was added, the reaction proceeds with comparable or even better yields than with some PTC catalysts, a quaternary salt being formed in situ. The deprotonation of the alc. takes place at the interface, since there was no OH⁻ extraction in organic medium and the yield depends on the stirring speed.
In the presence of aliquat, the yield does not change with the organic concentration of the catalyst. Statistical correlations obtained between the variations in yield and several other parameters were good.

=> d cost
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
CONNECT CHARGES 14.43 14.95
NETWORK CHARGES 2.22 2.34
SEARCH CHARGES 20.79 20.79
DISPLAY CHARGES 70.10 70.10
----- -----
FULL ESTIMATED COST 107.54 108.18

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -13.14 -13.14

IN FILE 'CAPIUS' AT 07:47:16 ON 10 JUN 2005

=> logoff hold
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 109.34 109.98

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -13.14 -13.14

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:49:46 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *

SESSION RESUMED IN FILE 'CPLUS' AT 08:32:46 ON 10 JUN 2005
FILE 'CPLUS' ENTERED AT 08:32:46 ON 10 JUN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	109.34	109.98
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

=> d his

(FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

FILE 'CPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005

L1	27615 SOLID LIQUID
L2	20709 LIQUID SOLID
L3	43992 L1 OR L2
L4	3753322 REACTION
L5	4694 L3(L)L4
L6	1199985 ETHER OR ESTER
L7	24236 ACID ANHYDRIDE
L8	1214708 L6 OR L7
L9	323 L8 AND L5
L10	215 L8(L)L5
L11	1102160 SALT
L12	52 L10 AND L11
L13	1323 WILLIAMSON
L14	18 L3 AND L13

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	110.24	110.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:33:49 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 08:37:59 ON 10 JUN 2005
FILE 'CAPLUS' ENTERED AT 08:37:59 ON 10 JUN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	110.24	110.88
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-13.14	-13.14

=> d his

(FILE 'HOME' ENTERED AT 07:24:59 ON 10 JUN 2005)

FILE 'REGISTRY' ENTERED AT 07:25:10 ON 10 JUN 2005

FILE 'CAPLUS' ENTERED AT 07:25:16 ON 10 JUN 2005

L1	27615 SOLID LIQUID
L2	20709 LIQUID SOLID
L3	43992 L1 OR L2
L4	3753322 REACTION
L5	4694 L3(L)L4
L6	1199985 ETHER OR ESTER
L7	24236 ACID ANHYDRIDE
L8	1214708 L6 OR L7
L9	323 L8 AND L5
L10	215 L8(L)L5
L11	1102160 SALT
L12	52 L10 AND L11
L13	1323 WILLIAMSON
L14	18 L3 AND L13

=> cake

L15	33594 CAKE
	8469 CAKES
L15	37917 CAKE

(CAKE OR CAKES)

=> 15 and 115

L16 49 L5 AND L15

=> d 116 39-49

L16 ANSWER 39 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1975:75831 CAPLUS
DN 82:75831
TI One-stage ammonia leaching of molybdic acid
AU Gizatulina, R. A.; Bershetskii, A. A.; Khavskii, N. N.; Kal'kov, A. A.;
Shmalei, B. N.; Zakarchevnyi, D. I.
CS USSR
SO Sbornik - Moskovskii Institut Stali i Splavov (1974), 77, 75-8
CODEN: SMSSAK; ISSN: 0371-1242
DT Journal
LA Russian

L16 ANSWER 40 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN

- AN 1972:45678 CAPLUS
DN 76:45678
TI Oxalic acid. IV. Decomposition of calcium oxalate with sulfuric acid
AU Sasaki, Eiichi
CS Ofuna Tech. Serv. Lab., Mitsui Toatsu Chem. Inc., Yokohama, Japan
SO Kogyo Kagaku Zasshi (1971), 74(12), 2426-9
CODEN: KGKZA7; ISSN: 0368-5462
DT Journal
LA Japanese
- L16 ANSWER 41 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1972:5765 CAPLUS
DN 76:5765
TI Mechanism of alkali reaction with bauxite charge components
AU Feshchenko, Z. I.; Skobeev, I. K.; Kuz'mina, G. V.
CS USSR
SO Obogashch. Met. Polez. Iskop. (1970) 75-6
From: Ref. Zh., Met. 1971, Abstr. No. 4G145
DT Journal
LA Russian
- L16 ANSWER 42 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1971:114670 CAPLUS
DN 74:114670
TI Behavior of niobium and tantalum under alkaline decomposition of
zircono-pyrochlore concentrate
AU Fedoryako, L. I.; Sheka, I. A.; Bogushevskaya, R. P.
CS USSR
SO Fiz.-Khim. Osn. Razlozh. Alyumosilikat. Gidrokhim. Metod. (1969) 154-9
From: Ref. Zh., Met. 1969, Abstr. No. 11G245
DT Journal
LA Russian
- L16 ANSWER 43 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1969:117231 CAPLUS
DN 70:117231
TI Alkaline processing of some uranium ores
AU Bunus, Fl.; Matei, Ilie; Sporea, V.
SO Revistade Chimie (Bucharest, Romania) (1969), 20(1), 19-24
CODEN: RCBUAU; ISSN: 0034-7752
DT Journal
LA Romanian
- L16 ANSWER 44 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1967:413999 CAPLUS
DN 67:13999
TI Pilot-plant tests of chlorine-soda leaching of low-grade
molybdenum-bearing products
AU Khryashchev, S. V.; Kozlovskaya, E. M.
SO Tsvetnye Metally (Moscow, Russian Federation) (1967), 40(2), 13-16
CODEN: TVMTAX; ISSN: 0372-2929
DT Journal
LA Russian
- L16 ANSWER 45 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1966:73909 CAPLUS
DN 64:73909
OREF 64:13816c-e
TI Formation of a new technology of production of antimony and its compounds
AU Batyuk, A. G.; Valiulin, R. G.; Lobanov, V. A.; Pak, N. T.
SO Khim. i Tekhnol. Sur'my, Akad. Nauk Kirg. SSR, Inst. Neorgan. i Fiz.,
Khim. (1965) 107-26
DT Journal

LA Russian

L16 ANSWER 46 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1964:400487 CAPLUS
DN 61:487
OREF 61:72b-c
TI Oxidation of cobalt with black nickel hydroxides in the process of reprecipitation of cobalt-nickel **cakes**
AU Gran, T. V.
SO Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation) (1964), 37(3), 487-92
CODEN: ZPKHAB; ISSN: 0044-4618
DT Journal
LA Unavailable

L16 ANSWER 47 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1954:34402 CAPLUS
DN 48:34402
OREF 48:6150a-b
TI Solid surface-active agents
IN Birch, Stanley F.; Harbourn, Charles L. A.; Desty, Dennis H.
PA Anglo-Iranian Oil Co. Ltd.
DT Patent
LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 697315		19530923	GB	

L16 ANSWER 48 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1947:25428 CAPLUS
DN 41:25428
OREF 41:5067a-h
TI Treatment of polymetallic ores and concentrates by the sulfatization method
AU Gromov, B. V.; Derkachev, D. I.
SO Tsvetnye Metally (Moscow, Russian Federation) (1947), 20(No. 1), 27-39
CODEN: TVMTAX; ISSN: 0372-2929
DT Journal
LA Unavailable

L16 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1915:11454 CAPLUS
DN 9:11454
OREF 9:1811d-h
TI Investigations on fatty fruits and seeds of our (German) colonies. IV. Canarium polyphyllum
AU Wagner, H.; Lampart, B.
CS Duisberg
SO Zeitschrift fuer Untersuchung der Nahrungs- und Genussmittel sowie der Gebrauchsgegenstaende (1915), 29, 105-11
CODEN: ZNGEA2; ISSN: 0372-9419
DT Journal
LA Unavailable

=> 18 and 116
L17 3 L8 AND L16

=> d 117 1-3 ti

L17 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Preparation of di-methyl trans-1,4-cyclohexanedicarboxylate

L17 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Purification of naphthalenedicarboxylic acid dialkyl esters

L17 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solid surface-active agents

=> logoff hold
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 126.99 127.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -13.14 -13.14

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 08:40:20 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 09:04:09 ON 10 JUN 2005
FILE 'CAPLUS' ENTERED AT 09:04:09 ON 10 JUN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 126.99 127.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -13.14 -13.14

=> logoff hold
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 126.99 127.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE -13.14 -13.14

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 09:04:20 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * * * * * Welcome to STN International * * * * * * * * * * * * * * *

| | | |
|--------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NEWS | 1 | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | "Ask CAS" for self-help around the clock |
| NEWS | 3 FEB 25 | CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered |
| NEWS | 4 FEB 28 | PATDPAFULL - New display fields provide for legal status data from INPADOC |
| NEWS | 5 FEB 28 | BABS - Current-awareness alerts (SDIs) available |
| NEWS | 6 FEB 28 | MEDLINE/LMEDLINE reloaded |
| NEWS | 7 MAR 02 | GBFULL: New full-text patent database on STN |
| NEWS | 8 MAR 03 | REGISTRY/ZREGISTRY - Sequence annotations enhanced |
| NEWS | 9 MAR 03 | MEDLINE file segment of TOXCENTER reloaded |
| NEWS | 10 MAR 22 | KOREPAT now updated monthly; patent information enhanced |
| NEWS | 11 MAR 22 | Original IDE display format returns to REGISTRY/ZREGISTRY |
| NEWS | 12 MAR 22 | PATDPASPC - New patent database available |
| NEWS | 13 MAR 22 | REGISTRY/ZREGISTRY enhanced with experimental property tags |
| NEWS | 14 APR 04 | EPFULL enhanced with additional patent information and new fields |
| NEWS | 15 APR 04 | EMBASE - Database reloaded and enhanced |
| NEWS | 16 APR 18 | New CAS Information Use Policies available online |
| NEWS | 17 APR 25 | Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications. |
| NEWS | 18 APR 28 | Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS |
| NEWS | 19 MAY 23 | GBFULL enhanced with patent drawing images |
| NEWS | 20 MAY 23 | REGISTRY has been enhanced with source information from CHEMCATS |
| NEWS | 21 MAY 26 | STN User Update to be held June 6 and June 7 at the SLA 2005 Annual Conference |
| NEWS | 22 JUN 06 | STN Patent Forums to be held in June 2005 |
| NEWS | 23 JUN 06 | The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available |
| NEWS EXPRESS | | JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005 |
| NEWS HOURS | | STN Operating Hours Plus Help Desk Availability |
| NEWS INTER | | General Internet Information |
| NEWS LOGIN | | Welcome Banner and News Items |
| NEWS PHONE | | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW | | CAS World Wide Web Site (general information) |

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 10:38:05 ON 10 JUN 2005

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:38:15 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSSPTA1623PAZ

PASSWORD:

** * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'HOME' AT 10:38:52 ON 10 JUN 2005
FILE 'HOME' ENTERED AT 10:38:52 ON 10 JUN 2005

| COST IN U.S. DOLLARS | SINCE FILE
ENTRY | TOTAL
SESSION |
|----------------------|---------------------|------------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'CAPLUS' ENTERED AT 10:39:04 ON 10 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005 (20050609/ED)

New CAS Information Use Policies. enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> column(1) derivatization
      382821 COLUMN
      99435 COLUMNS
      431756 COLUMN
                  (COLUMN OR COLUMNS)
      22733 DERIVATIZATION
      336 DERIVATIZATIONS
```

22932 DERIVATIZATION
(DERIVATIZATION OR DERIVATIZATIONS)

L1 5953 COLUMN(L) DERIVATIZATION

=> ether or ester

461819 ETHER
141927 ETHERS
520226 ETHER
(ETHER OR ETHERS)
562068 ESTER
419051 ESTERS
784851 ESTER
(ESTER OR ESTERS)

L2 1199985 ETHER OR ESTER

=> 11 and 12

L3 732 L1 AND L2

=> liquid solid or solid liquid

684284 LIQUID
122774 LIQUIDS
777118 LIQUID
(LIQUID OR LIQUIDS)
953591 LIQ
90892 LIQS
988991 LIQ
(LIQ OR LIQS)
1369240 LIQUID
(LIQUID OR LIQ)
963770 SOLID
273646 SOLIDS
1165923 SOLID
(SOLID OR SOLIDS)
20709 LIQUID SOLID
(LIQUID(W) SOLID)
963770 SOLID
273646 SOLIDS
1165923 SOLID
(SOLID OR SOLIDS)
684284 LIQUID
122774 LIQUIDS
777118 LIQUID
(LIQUID OR LIQUIDS)
953591 LIQ
90892 LIQS
988991 LIQ
(LIQ OR LIQS)
1369240 LIQUID
(LIQUID OR LIQ)
27615 SOLID LIQUID
(SOLID(W) LIQUID)

L4 43992 LIQUID SOLID OR SOLID LIQUID

=> 13 and 14

L5 4 L3 AND L4

=> d 15 1-4 ti

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

TI Fatty acid derivatives as potential phase change materials

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

TI Solid-phase derivatization reactions for biomedical liquid chromatography

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chromatographic determination of bile acids in biological fluids with sensitive and selective detection

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Enantiospecific high-performance liquid chromatographic (HPLC) determination of baclofen and its fluoro analog in biological material

=> d 15 2 ti fbib abs

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
TI Solid-phase derivatization reactions for biomedical liquid chromatography
AN 1994:649981 CAPLUS
DN 121:249981
TI Solid-phase derivatization reactions for biomedical liquid chromatography
AU Krull, I. S.; Szulc, M. E.; Bourque, A. J.; Zhou, F.-X.; Yu, J.; Strong, R.
CS Department of Chemistry, 102 Hurtig Building, Northeastern University, 360 Huntington Avenue, Boston, MA, 02115, USA
SO Journal of Chromatography, B: Biomedical Applications (1994), 659(1+2), 19-50
CODEN: JCBBEP; ISSN: 0378-4347
PB Elsevier
DT Journal; General Review
LA English
AB A review with 116 refs. Polymeric reagents have been developed for performing off- and online **derivatizations** of numerous organic analytes in HPLC-detection modes. Such reagents utilize ionic or covalent attachment of labile tags that possess specific detector enhancement properties: UV, electrochem., fluorescence, and so forth. Specific synthetic procedures have evolved to generate various linkages of the tag to the underlying, polymeric support, usually involving activated **ester** connections (leashes). The polymer itself may play a number of roles in the nature of the overall reactions, such as hydrophobic-hydrophilic exclusion, pore size restriction, stabilization of the attachment leashes, and protection of the tags from hydrolysis in aqueous media. The basic, underlying chemical of polymeric reagents has evolved to the point where it is possible to engineer the polymer support itself, the attachment leash, and the various tags that are then transferred to the analyte mols. These procedures have now reached the stage of commercialization and practical applicability for real-world drugs and bioorgs. in complex biofluid type samples. Polymer supported reagents can now be used for direct injection of biofluids with solid-phase (hydrophobic) extraction of the analytes of interest, followed by sample cleanup, **derivatization**, elution onto the HPLC **column**, peak compression, gradient HPLC elution, multiple detection, and final data interpretation with quantitation. This review summarizes much or most of what has been described in the scientific literature over the past decade in the various areas where polymeric reagents are being used for **derivatization** in HPLC and in capillary electrophoresis as well.

=> logoff hold

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 20.85 | 21.06 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -0.73 | -0.73 |

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 10:41:43 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1623PAZ

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CPLUS' AT 11:05:27 ON 10 JUN 2005
FILE 'CPLUS' ENTERED AT 11:05:27 ON 10 JUN 2005
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|--------------------------------------------|------------------|---------------|
| FULL ESTIMATED COST | 21.30 | 21.51 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | -0.73 | -0.73 |
| => file reg | | |
| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
| FULL ESTIMATED COST | 21.30 | 21.51 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | -0.73 | -0.73 |

FILE 'REGISTRY' ENTERED AT 11:05:31 ON 10 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JUN 2005 HIGHEST RN 852020-24-7
DICTIONARY FILE UPDATES: 9 JUN 2005 HIGHEST RN 852020-24-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

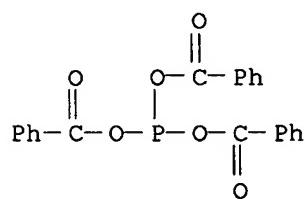
=> e tribenzoylphosphite/cn
E1 1 TRIBENZOYLPHOSPHIDE/CN
E2 1 TRIBENZOYLPHOSPHINE/CN
E3 0 --> TRIBENZOYLPHOSPHITE/CN
E4 1 TRIBENZPORPHIN/CN
E5 1 TRIBENZYL (1.FWDARW.6)-A-GALACTAN/CN
E6 1 TRIBENZYL (1.FWDARW.6)-A-GLUCAN/CN
E7 1 TRIBENZYL (1.FWDARW.6)-A-MANNAN/CN
E8 1 TRIBENZYL 1,2,3-BUTANETRICARBOXYLATE/CN
E9 1 TRIBENZYL BORATE/CN
E10 1 TRIBENZYL CIS,CIS-1,3,5-TRIMETHYLCYCLOHEXANE-1,3,5-TRICARBOXYLATE/CN
E11 1 TRIBENZYL CITRATE/CN
E12 1 TRIBENZYL ISOCYANURATE/CN

=> e tribenzoyl phosphite/cn
E1 1 TRIBENZOYL BORATE/CN
E2 1 TRIBENZOYL GLYCEROL ESTERASE/CN
E3 1 --> TRIBENZOYL PHOSPHITE/CN
E4 1 TRIBENZOYL-A-L-RHAMNOPOYRANOSYL BROMIDE/CN
E5 1 TRIBENZOYL-4,5-TRANS-EPOXYSPHINGOSINE/CN
E6 1 TRIBENZOYL-4-AMINOPHENOL/CN
E7 1 TRIBENZOYL CYCLOPROPANE/CN
E8 1 TRIBENZOYLENEBENZENE/CN
E9 1 TRIBENZOYLHYDRAZINE/CN
E10 1 TRIBENZOYLLEVOCOSAN/CN
E11 1 TRIBENZOYLMETHANE/CN
E12 1 TRIBENZOYLPHOSPHIDE/CN

=> e3
L6 1 "TRIBENZOYL PHOSPHITE"/CN

=> d 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 54862-45-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzoic acid, trianhydride with phosphorous acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, anhydride with phosphorous acid (7CI)
OTHER NAMES:
CN Tribenzoyl phosphite
FS 3D CONCORD
MF C21 H15 O6 P
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> \file caplus
0 FILE
0 CAPLUS
L7 0 \FILE CAPLUS
(FILE(W)CAPLUS)

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 16.50 38.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE 0.00 -0.73

FILE 'CAPLUS' ENTERED AT 11:06:44 ON 10 JUN 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Jun 2005 VOL 142 ISS 25
FILE LAST UPDATED: 9 Jun 2005 (20050609/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> 16/prep
8 L6
3314614 PREP/RL
L8 5 L6/PREP
(L6 (L) PREP/RL)

=> d 18 1-5 ti

L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for producing ethers, esters or acid anhydrides especially for preparing tribenzoyl phosphite from ammonium benzoate and phosphorous chloride including separation of the ammonium chloride

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for carrying out a solid-liquid reaction

L8 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Method for producing α -aminophosphonic acids by the reaction of hexahydro triazine derivative with triorgano phosphate

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Kinetics of the acetylation of arylamines in acetic acid in the presence of phosphorus trichloride and triethylamine

L8 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
TI Di- and tricarboxyphosphines

=> logoff hold

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|--------------------------------------------|------------------|---------------|
| FULL ESTIMATED COST | 6.19 | 44.20 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -0.73 |

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:10:03 ON 10 JUN 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x::x

LOGINID:SSSPTA1623PAZ

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * Welcome to STN International * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 FEB 28 PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS 4 FEB 28 BABS - Current-awareness alerts (SDIs) available
NEWS 5 MAR 02 GBFULL: New full-text patent database on STN
NEWS 6 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 22 KOREPAT now updated monthly; patent information enhanced
NEWS 9 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS 10 MAR 22 PATDPASPC - New patent database available
NEWS 11 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS 12 APR 04 EPFULL enhanced with additional patent information and new fields
NEWS 13 APR 04 EMBASE - Database reloaded and enhanced
NEWS 14 APR 18 New CAS Information Use Policies available online
NEWS 15 APR 25 Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS 16 APR 28 Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus
NEWS 17 MAY 23 GBFULL enhanced with patent drawing images
NEWS 18 MAY 23 REGISTRY has been enhanced with source information from